Appln. No. 09/973,091 Amd. dated June 14, 2004 Reply to Office Action of January 26, 2004

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

(Currently Amended) A near-field optical flying head for near-field recording on a disk, comprising:

a carrier maintained in a near-field distance from the surface of the disk to be recorded;

a solid immersion lens of semispherical shape installed in one side of said carrier facing the disk to be recorded, said solid immersion lens having refraction face facing the disk to be recorded; and

a focusing lens installed in said carrier and spaced from said solid immersion lens at an inner side, adapted to focus a laser beam onto said solid immersion lens, enabling a part of electromagnetic wave to pass through said refraction face and to make a near-field exposure to the disk to be recorded;

wherein said solid immersion lens comprises a light scattering layer plated on said refraction face, which causes a chemical reaction to release releases silver atoms and to enhance the electromagnetic wave passing through said refraction face in by providing a small optical aperture for the passing of the electromagnetic wave when received light energy is received or heat energy and is reduced reduces to an original compound after disappearance of the light energy or heat energy, and a dielectric layer plated on said light scattering layer and adapted to prohibit escaping of gas which is generated during chemical reaction of said light

Appln. No. 09/973,091 Amd. dated June 14, 2004 Reply to Office Action of January 26, 2004

scattering layer wherein said light scattering layer is made of one of a series of AgX (silver halide) compounds.

- 2. (Original) The near-field optical flying head as claimed in claim 1 wherein said light scattering layer is made of AgOx (silver oxide) that releases silver atoms when received heat energy.
- 3. (Currently Amended) The near-field optical flying head as claimed in claim 1 wherein said light scattering layer is made of one of a the series of AgX (silver halide) compounds including includes AgF (silver fluoride), AgCI (silver chloride), AgBr (silver bromide), AgI (silver iodide), and AgAt (silver astatide).
- 4. (Original) The near-field optical flying head as claimed in claim 1 wherein said light scattering layer covers the whole area of said refraction face of said solid immersion lens.
- 5. (Original) The near-field optical flying head as claimed in claim 1 wherein said light scattering layer covers the center area of said refraction face of said solid immersion lens.
- 6. (Original) The near-field optical flying head as claimed in claim 1 wherein said dielectric layer is made of one of the materials of silicon nitride (Si₃N₄) and zinc sulfide-silicon dioxide (ZnS-SiO₂).

7-11. (Cancelled)